ABSTRACT

A transmissions section separates a processing on a fast data buffer path and a processing on an interleaved data buffer in units of tones, allows a fast data buffer to secure a transmission rate to, for example, an extent that communication can be held and outputs data on the communication without being encoded, and allows an interleaved data buffer to secure remaining tones and turbo-encodes and outputs bits on the tones; and a receiving section allocates Fourier-transformed frequency data to the fast data buffer path and the interleaved data buffer path in units of tones, respectively, in which state, the receiving section hard-determines the bits on the tones allocated to the fast data buffer path and turbo-encodes the bits on the tones allocated to the interleaved data buffer path.